

Title (en)

MEDICAL IMAGE PROCESSING APPARATUS AND METHOD FOR ACQUIRING TRAINING IMAGES

Title (de)

MEDIZINISCHE BILDVERARBEITUNGSVORRICHTUNG UND VERFAHREN ZUR ERFASSUNG VON TRAININGSBILDERN

Title (fr)

APPAREIL DE TRAITEMENT D'IMAGES MÉDICALES ET PROCÉDÉ D'ACQUISITION D'IMAGES D'APPRENTISSAGE

Publication

EP 3716214 A1 20200930 (EN)

Application

EP 20163504 A 20200317

Priority

US 201916370230 A 20190329

Abstract (en)

According to one embodiment, a medical image processing apparatus includes a processor and an acquirer. The processor inputs, to a trained model trained based on a first image acquired with a first x-ray beam having a first cone angle and a second image including a cone-beam artifact and acquired using simulation based on the first image, a third image including a cone-beam artifact and acquired with a second x-ray beam having a second cone angle larger than the first cone angle to generate a fourth image corresponding to the third image with a reduced cone-beam artifact. The acquirer acquires the third image.

IPC 8 full level

G06T 11/00 (2006.01)

CPC (source: EP US)

A61B 6/032 (2013.01 - US); **A61B 6/5205** (2013.01 - US); **G06N 3/084** (2013.01 - US); **G06T 11/008** (2013.01 - EP); **A61B 6/4085** (2013.01 - US); **G06N 3/047** (2023.01 - US); **G06T 11/005** (2013.01 - US); **G06T 11/006** (2013.01 - US); **G06T 2211/441** (2023.08 - EP); **G06V 2201/03** (2022.01 - US); **G16H 50/20** (2018.01 - US); **G16H 50/50** (2018.01 - US)

Citation (search report)

- [A] US 2018374245 A1 20181227 - XU JIAOFENG [US], et al
- [XAI] YANG LEI ET AL: "Image quality improvement in cone-beam CT using deep learning", PROCEEDINGS OF THE SPIE, vol. 10948, 17 February 2019 (2019-02-17) - 20 February 2019 (2019-02-20), SPIE, USA, pages 1 - 6, XP055701969, ISBN: 978-1-5106-2544-0, DOI: 10.1117/12.2512545

Cited by

CN112561825A; CN112819911A; CN113726983A; CN113902912A

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3716214 A1 20200930; **EP 3716214 B1 20240320**; JP 2020163124 A 20201008; JP 7455622 B2 20240326; US 11026642 B2 20210608; US 2020305806 A1 20201001

DOCDB simple family (application)

EP 20163504 A 20200317; JP 2020043743 A 20200313; US 201916370230 A 20190329